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Note to editors: Gaston will be available for in-person interviews today at 2 p.m.

President Obama Honors INL Scientist with Early Career Achievement Award

WASHINGTON D.C. — President Barack Obama today named INL scientist Derek Gaston as one of 96 recipients of the Presidential Early Career Awards for Scientists and Engineers, the highest honor bestowed by the United States government on science and engineering professionals in the early stages of their independent research careers.

As leader of the Computational Frameworks Group in INL's Fuels Modeling and Simulation Department, Gaston works in the field of multiphysics and has developed software tools being used by laboratories and research institutions around the globe to create cutting-edge simulation codes.

More simply, he has developed an easier way for computers to solve systems of equations and create simulations of complex phenomena. With his software program dubbed MOOSE (Multiphysics Object Oriented Simulation Environment), Gaston's tool is working on many aspects of the nuclear reactor fuel life cycle.

For instance, it can enlighten researchers of fuel fabrication problems and fuel performance issues to try to extend the life of current light water reactors while looking toward the future by simulating new reactor designs that can give cleaner, more sustainable energy. The copyrighted MOOSE software is also being used for non-nuclear problems such as environmental remediation of chemical spills, carbon sequestration and even oil shale recovery processes.

"This award is an amazing honor, Gaston said. "I've put my blood, sweat and soul into my work, and to have it acknowledged at this level is an incredible feeling. None of this would have been possible without the hard work and dedication of my team and management, and the love and support of my wife and family. I'd like to sincerely thank everyone who has helped me along the way."

"Discoveries in science and technology not only strengthen our economy, they inspire us as a people," Obama said. "The impressive accomplishments of today's awardees so early in their careers promise even greater advances in the years ahead."

In 2010, Gaston received the INL early career award from Laboratory Director John Grossenbacher. He is the lab's first recipient of the Presidential Early Career Award.

The awards, established by President Clinton in 1996, are coordinated by the Office of Science and Technology Policy within the Executive Office of the President. Awardees are selected for their pursuit of innovative research at the frontiers of science and technology and their commitment to community service as demonstrated through scientific leadership, public education or community outreach.

The awards embody the high priority the Obama Administration places on producing outstanding scientists and engineers to advance the nation's goals, tackle grand challenges, and contribute to the American economy. The recipients are employed or funded by the following departments and agencies: Department of Agriculture, Department of Commerce, Department of Defense, Department of Education, Department of Energy, Department of Health and Human Services, Department of the Interior, Department of Veterans Affairs, Environmental Protection Agency, National Aeronautics and Space Administration, and the National Science Foundation. They join together annually to nominate the most meritorious scientists and engineers whose early accomplishments show the greatest promise for assuring America's pre-eminence in science and engineering and contributing to the awarding agencies' missions.

INL is one of the DOE's 10 multiprogram national laboratories. The laboratory performs work in each of the strategic goal areas of DOE: energy, national security, science and environment. INL is the nation's leading center for nuclear energy research and development. Day-to-day management and operation of the laboratory is the responsibility of Battelle Energy Alliance.

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